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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/500,189	10/25/2004	Gang Wu	4035-0167PUS1	9210

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EXAMINER	
APPIAH, CHARLES NANA	

ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 08/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/500,189	WU ET AL.	
	Examiner	Art Unit	
	Charles N. Appiah	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-12 and 14* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-12 and 14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 10, 2006 has been entered.

Response to Arguments

2. Applicant's arguments filed on April 11, 2006 have been fully considered but they are not persuasive. In response to Applicants' argument that "in the Silver et al. reference, the corresponding system is a cellular telephone which is clearly not a non-paging system, since the cellular telephone can also be used to page (that is make an electronic connection to and give an indication of the connection at the receiving end with another cellular telephone)" examiner maintains that Silver's system as illustrated in Fig. 6, clearly indicates the cellular network and/or pager/mobile terminal does not perform paging since it only sends a page request to the paging network and furthermore it is capable of data communication.

In view of the above silver still meets the inventions as claimed and the rejections using Silver et al. are maintained.

Claim Rejections - 35 USC § 112

3. Claims 1-5, 7-12 and 14 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recitation of the new limitation "non-paging" wireless communication system in claims 1, 3, 7, 9 makes the claims vague and indefinite as it appears in paragraph 0041 of the specification that "non-paging" is equivalent to "non-calling" or 'no calling function", however, Applicant's disclosure fails to provide adequate support as to what clearly constitute "non-paging" system and/or communication terminal as set forth in the claims.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-3, 9 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by **Silver et al. (5,701,337)**.

Regarding claim 1, Silver discloses a wireless communication method (see Figs. 6-7), for performing wireless communication between a calling side (inherent in incoming call to cellular network 43) and a called side (terminal 1), the wireless communication method using a wide-area wireless communication system capable of

wireless (paging network 49), and a non-paging wireless communication system capable of data communication (cellular network 43), the method comprising: a paging-sending step of sending a page to the called side by the calling side (inherent feature of receiving incoming call at cellular network and sending a page request to paging network, step 81, col. 6, lines 48-49), a paging step of using the wide-area wireless communication system to page receiving means in a wireless communication terminal of the called side (transmit mobile paging signal to mobile phone portion, steps 83, 85, 89, 91, col. 6, lines 50-53), a paging detecting step of detecting, by the wireless communication terminal, paging from the wide-area wireless communication system (pager portion (pager portion receiving paging signal, step 93, col. 6, lines 53-57), a paging notifying step of notifying, by the receiving means in the wireless communication terminal, wireless communication controlling wireless communication means that the receiving means has been paged (pager portion activates mobile phone portion, step 95, col. 7, lines 1-8), a connecting step of connecting to the wireless communication system by the wireless communication means (mobile phone portion registers with cellular network, step 97, col. 7, lines 9-10), a communicating step of performing wireless communication between the calling side and the called side (cellular phone routing call inherently between calling terminal and the called terminal, step 99, col. 7, lines 10-12), and a disconnecting step of disconnecting connection to the wide area wireless communication system by at least one of the calling side and the called side (turning off mobile phone portion after completion of each call, step 101, col. 7, lines 7-12).

Regarding claim 2/1, Silver further discloses wherein, in the communication step, a speech conversation is performed (routing of call to the mobile portion in the normal manner inherently leads to performance of speech conversation, see col. 7, lines 10-12).

Regarding claim 3, Silver discloses a wireless communication system (see Figs. 6-7), capable of data communication, comprising: a paging terminal for a calling side to perform communication (incoming call received at cellular network is made by calling terminal, step 81 and page request is sent to paging network 49), a network to which the paging terminal is connected (cellular network 43 and paging network 49), a wireless communication base station (inherent in cellular network, 43), and a wide area wireless communication base station which are connected to the network (inherent in paging network, 49), and a wireless communication terminal for a called side to perform communication (combined mobile phone/pager 1), wherein the wireless communication terminal is a non-paging wireless communication terminal (combined mobile phone/pager 1), simultaneously comprises receiving means for receiving a page from the wide-area wireless communication base station (feature of receipt of paging signal 51, col. 6, lines 34-36), and communication means for performing data communication with the wireless communication base station (call being routed to terminal 1 from cellular network).

Regarding claim 9, Silver discloses a wireless communication terminal (1), capable of communicating with both a wide area wireless communication system capable of wireless paging (paging network 49), and a non-paging wireless

communication system capable of data communication (cellular network 43), the wireless communication terminal comprising: receiving means for receiving a wireless page in the wide area wireless communication system (page 510), paging information recognizing means for recognizing information concerning a calling side and paging details, the information being included in the wireless page (see col. 6, line 61 to col. 7, line 8), and wireless communication means for performing wireless communication in the wireless communication system when the paging-information-information recognizing means requests wireless communication to start (transmitting and receiving paging signal, steps 91-93, see col. 7, lines 1-16).

Regarding claim 10, Silver further discloses wireless communication means activating means (pager portion activates mobile phone portion, see col. 7, lines 1-10), in a configuration in which the wireless communication means in the wireless communication terminal is normally in an inactivated state when the paging-information requests wireless communication to start, the wireless communication means activating means changes the wireless communication means to be activated (page signal 51, causing mobile/page terminal 1 to register with cellular network, Fig. 6, see col. 7, lines 1-16).

6. Claims 7 and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by **Fujimori et al. (6,327,475).**

Regarding claim 7, Fujimori discloses a wide-area wireless communication base station for a wide area wireless communication system (see Fig. 6) in which a calling side is capable of calling a called side, the base station comprising a plurality of means:

network connecting means for connecting to a network which is not for the wide area wireless communication (see connection to telephone line), paging-request receiving means for receiving a paging request using an identification number on the network for a non-paging wireless terminal of the called side (receiving section 11 receives telephone numbers and a message, col. 7, lines 43-46), intersystem identification number converting means for converting an identification number on the network to an identification number in the wide area wireless communication system (conversion section converts the telephone number into paging signal, col. 7, lines 46-52), and a paging means for calling the wireless communication terminal by using an identification number in the wide area wireless communication system, (transmission of paging signal and the message by radio, see col. 7, lines 50-52, col. 8, lines 11-35).

Regarding claim 8, Fujimori further discloses wherein the wide area communication system is a pager system (paging system, col. 8, lines 21-42).

Claim Rejections - 35 USC § 103

7. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

8. Claims 4 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Silver et al** as applied to claims above, and further in view of Tran **(6,496,693).**

Regarding claims 4 and 11, Silver further discloses as illustrated in Fig. 1, audio input/output means for outputting the audio obtained by conversion and inputting of audio (see microphone/speaker which is standard to mobile phone/pager 1), but fails to

explicitly teach audio and/or audio/data conversion means for performing mutual conversion between audio information and data information.

In an analogous field of endeavor, Tran discloses a method for transmitting data and/or audio messages through transforming a voice message into a text message and using speech recognition (see col. 1, line 55 to col. 2, line 2, col. 4, lines 20-41).

It would therefore have been obvious to one of ordinary skill in the art to incorporate Tran's text to speech and speech to text technology into Silver's mobile phone /pager terminal in order to facilitate the capability of receiving messages in different formats such as text or voice.

9. Claims 5/3 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Silver et al.** as applied to claim 3 above, and further in view of **Blink et al. (6,542,751).**

Regarding claims 5/3 and 12, Silver further discloses wherein the wide area wireless communication base station is a pager base station (inherent in paging network 49) and the wireless terminal includes receiving means corresponding to the pager base station (page 51 reception capability), but fails to specifically disclose that the wireless communication system is a wireless LAN, WAN, PAN, or ITS system.

Blink discloses a multi-mode paging system that can selectively page an individual through a plurality of paging mechanisms (see col. 1, line 54 to col. 2, line 3). According to Blink, the processor-based paging unit can be used in a Local Area Network (LAN), wide area pager (see Fig. 1, col. 2, line 46 to col. 3, line 8).

It would therefore have been obvious to one of ordinary skill in the art to use Silver's combined mobile phone/pager as a multi-mode terminal capable of communicating in different systems such as a LAN in order to provide greater flexibility and roaming capabilities as taught by Blink.

10. Claim 5/4 is rejected under 35 U.S.C. 103(a) as being unpatentable over **Silver et al and Tran** as applied to claim 4 above, and further in view of **Blink et al. (6,542,751).**

Regarding claim 5/4, Silver further discloses wherein the wide area wireless communication base station is a pager base station (inherent in paging network 49) and the wireless terminal includes receiving means corresponding to the pager base station (page 51 reception capability), but the combination of Silver and Tran fail to specifically disclose that the wireless communication system is a wireless LAN, WAN, PAN, or ITS system.

Blink discloses a multi-mode paging system that can selectively page an individual through a plurality of paging mechanisms (see col. 1, line 54 to col. 2, line 3). According to Blink, the processor-based paging unit can be used in a Local Area Network (LAN), wide area pager (see Fig. 1, col. 2, line 46 to col. 3, line 8).

It would therefore have been obvious to one of ordinary skill in the art to use Silver's combined mobile phone/pager as further modified by Tran as a multi-mode terminal capable of communicating in different systems such as a LAN in order to provide greater flexibility and roaming capabilities as taught by Blink.

Allowable Subject Matter

9. Claims 7-8 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. McAfee (5,581,594) discloses a method for initiating communication via paging a mobile device.

Trompower et al. (6,275,477) discloses a pager system that can be coupled to a LAN to provide localized paging.

Sandahl (6,965,297) discloses a wide area radio paging system.

Ghisler (5,541,976) discloses a communication system for integrating paging systems with cellular mobile radio telephone systems.

Miska et al. 96,463,277) discloses a communication system with call bridging functionality.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Appiah whose telephone number is 571 272-7904. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nick Corsaro can be reached on 571 272-7876. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CA

CHARLES APPIAH
PRIMARY EXAMINER